NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NOTICE

National Environmental Policy Act (NEPA), Environmental Assessment (EA) for the NASA Jet Propulsion Laboratory On-Site Parking Structure, July 2012

AGENCY

National Aeronautics and Space Administration, Jet Propulsion Laboratory

ACTION

Finding Of No Significant Impact (FONSI)

SUMMARY

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321, et seq.), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508), and NASA policy and procedures (14 CFR Part 1216, Subpart 1216.3), and after careful review of the EA, NASA has made a finding of no significant impact (FONSI) with respect to the proposed NASA Jet Propulsion Laboratory (JPL) On-Site Parking Structure. On the basis of the EA for the On-Site Parking Structure, it is concluded that the environmental impacts associated with the proposed action at Alternative A-Arroyo Parking Structure or Alternative B- Mall Parking Structure will not individually or cumulatively have a significant effect on the quality of the human and natural environment. Thus, an Environmental Impact Statement will not be prepared.

The NASA JPL On-Site Parking Structure EA considered the environmental impacts from the construction and operation of an on-site parking structure at NASA JPL to address the imminent and long-term need associated with the expiration of the East Arroyo Parking Lot lease and its 1,093 parking spaces in 2013. Since 1952, the City of Pasadena has leased the 3.84-hectare (9.58-acre) East Arroyo Parking Lot to NASA JPL for motor vehicle parking by its on-site workforce. The current lease period extends through June 30, 2013. In 2007, the City of Pasadena notified NASA JPL that it has another beneficial use for the East Arroyo Parking Lot site and it intends to install percolation ponds (spreading basins). NASA JPL supports the City of Pasadena's groundwater improvement projects relative to environmentally beneficial use of its land as a spreading basin. Thus, NASA JPL must vacate the East Arroyo Parking Lot and construct an onsite parking structure. In the EA, NASA analyzes the potential environmental impacts of feasible alternatives, including the No-Action Alternative.

Once the parking structure is constructed and in use, NASA JPL would remove all structures and other improvements made by NASA JPL in the formerly leased East Arroyo Parking lot. Improvements to be removed by NASA JPL would include:

- Removing the guard structure at the southern end of the leased parking area;
- Removing all NASA JPL bus stops and their foundations;
- Removing all chain link fencing and gates surrounding the leased parking lot area;
- Removing chain link fencing on north and south side of bridle trail crossing the parking lot area:
- Removing all bollards, sign posts, and lighting located in the leased parking lot area;
- Removing asphalt paving and base material; and
- Filling and compacting holes in soil left from the removal of the aforementioned foundations, footings, poles or other structures in the leased parking area.

Removal of the existing lot improvements would not include the removal of paving on the Lower Road nor approximately 200 parking spaces to remain for the City of Pasadena. This is consistent with the lease between the City of Pasadena and NASA JPL.

ALTERNATIVES

Parking structure design considerations and selection criteria described in the EA were used to develop alternatives which include parking structures located on the north, south, west, east, and "mall" areas of the facility. These five on-site locations were identified as potential alternative sites for construction of the on-site parking structure. Three of the five on-site locations were eliminated from further review because they were not reasonable alternatives. The remaining two alternatives continued on for evaluation in the EA as the proposed action, and these are: Alternative A- Arroyo Parking Structure, and Alternative B- Mall Parking Structure. The No Action Alternative was also evaluated in detail. The No Action Alternative assumes that neither Alternative A- Arroyo Parking Structure nor Alternative B-Mall Parking Structure would be constructed and the imminent and long-term parking needs of NASA JPL would not be met. Although this alternative does not satisfy the purpose and need for imminent and long-term parking at NASA JPL, it is included in the environmental analysis and is analyzed in accordance with Council on Environmental Quality (CEQ) regulations for implementing NEPA.

Alternative A, Arroyo Parking Structure

Alternative A would be a concrete parking structure located in the southeast edge of NASA JPL adjacent to the Arroyo Seco. With a maximum footprint of approximately 6,612 sq m (71,176 SF), the rectangular structure would be constructed on an area of not more than 1.3 ha (3.2 ac), would have no more than 7 levels and include approximately 1,250 parking stalls.

The site is owned by NASA and occupied by an asphalt parking lot, which slopes gently towards the south. Underground utilities, including a 25-cm (10-in) water main, storm drains, and catch basins, exist in the proposed project area but would not be moved or affected under Alternative A. Two structures, a 427-sq m (4,600-SF) corrugated metal hangar (Building 322) and temporary modular offices (Building 1714), which is currently empty, would be demolished as part of Alternative A. Building 322 would be re-constructed on the north end of the proposed project site. The new structure (to be named Building 344) would duplicate Building 322 and would consist of a 9-m (30-ft) tall pre-manufactured metal building on a concrete slab with a footprint of 17.7 m (58 ft) by at least 23 m (75 ft) long. The interior would be open with a free standing 5-ton gantry crane spanning the width and running the length of the building. Building 344 would include power, lighting, fire detection & protection systems, roof & wall insulation, and a HVAC system to JPL standards.

The proposed parking structure is to be design-build and the project has yet to enter into the design phase. However, for this EA, NASA JPL assumed a contemporary parking structure design with double-bay double-helix ramp-access. NASA JPL does not anticipate design features for either alternative that would be so unique or so far outside of this generic structure. If the ultimate design does differ substantially, then further analysis will be conducted as appropriate and additional NEPA as warranted.

Alternative B, Mall Parking Structure

Alternative B would consist of a concrete parking structure with a maximum footprint of 4,320 sq m (46,500 SF). The proposed approximately 1,000-stall Mall Parking Structure would be no more than 9 levels and constructed in a 1.7 ha (4.2 ac) area of the existing Mariner Mall area of NASA JPL. The Mariner Mall is located at the main entrance to the NASA JPL facility and is almost entirely surrounded by buildings.

Three structures are located within the proposed structure footprint and would be demolished, then relocated, as part of Alternative B. The buildings are, Building 249, Visitor Control with an areas of 399 sq m (4,296 SF); Building 250, Main Guard Shelter with an area of 18.5 m (199 SF); and Building 257, Main Guard Island with an area of 2.4 sq m (26 SF). In addition, the removal of approximately 114 mature landscape trees would be required. There would be 8 permanent workforce and 3 security personnel that would need to be relocated from these structures. NASA JPL also considered replacing or co-locating these demolished structures within the proposed Mall Parking Structure, but either would be a lengthy and costly process to implement.

The proposed parking structure is to be design-build and the project has yet to enter into the design phase. However, for this EA, NASA JPL assumed a contemporary parking structure design with double-bay double-helix ramp-access. NASA JPL does not anticipate design features for either alternative that would be so unique or so far outside of this generic structure. If the ultimate design does differ substantially, then further analysis will be conducted as appropriate and additional NEPA as warranted.

ANTICIPATED ENVIRONMENTAL IMPACTS

In addition to fulfilling the requirements of NEPA, its associated regulations, and the regulations of NASA, this EA complies with all applicable environmental, natural resource, and cultural resource statutes, regulations, and guidelines, which may require permits, approvals, consultations with outside agencies, or implementation of mitigation measures. Those considerations are included in the separate analyses set forth in the EA. Any additional statutes, regulations, and guidelines are included in the EA, by resource area.

Analysis of potential environmental impacts associated with an EA typically addresses numerous resource areas that may be affected by implementation of the proposed actions or a no action alternative. In the case of NASA JPL implementing the proposed action at either Alternative A, Alternative B sites, certain environmental resource areas that typically receive attention have been initially examined and determined not to warrant detailed analysis as per CEQ guidance (40 CFR 1501.7[3]). These areas include socioeconomics, environmental justice, geology and soils, and cultural resources.

Those resource areas warranting further discussion in the EA because of the potential effect the proposed action may have on that resource area include land use, traffic and transportation, utilities and services, noise, air quality, water resources, biological resources, hazardous materials and waste, and visual resources. The EA demonstrated that there would be no significant adverse environmental impact associated with implementation of the proposed action at either alternative site.

Mitigation measures have been developed and will be implemented to minimize short- and long-term impacts to the Proposed Action. These best management practices (BMPs) and mitigation measures are summarized below:

- On-site bus services may be rescheduled and/or re-routed to avoid times or routes that would otherwise create localized impacts due to construction activities.
- Contractors will be provided specific construction routes and schedules designed to minimize conflicts with routine vehicular traffic and avoid normal peak-traffic hours of on-site personnel.
- All contractors performing work lasting 2 weeks or longer in duration will receive "Rapid-gate" badges, precluding them from having to physically check in at the gate every time they enter or leave the facility.

On-Site Parking Structure at NASA JPL

- Design landscape plans for minimum water use (e.g., plant native, drought-tolerant species); incorporate energy conservation measures into parking structure design to mitigate impacts related to power systems; recycle construction-related debris.
- Contractors will employ routine maintenance of all construction equipment, including noise mufflers, and regular maintenance of the emission control devices on all construction equipment to reduce fugitive dust during construction.
- Dust suppression and other construction-related water uses will be performed using water from tanker trucks
- Construction contractors will be required to submit a Construction Management Plan including plans to control impacts to air quality during construction.
- Contractors will adhere to work noise restriction schedules contained in municipal codes to minimize potential impacts from demolition and construction activities on the surrounding residential properties.
- Portable noise barriers within the equipment area and around stationary noise sources will be established.
- NASA JPL will implement erosion and sediment control practices, such as sediment trapping, filtering, and other BMPs, as appropriate.
- NASA JPL will prepare a Storm Water Pollution Prevention Plan that will address BMPs employed to control erosion and sediment loss at the project site.

PUBLIC INVOLVEMENT

NASA JPL sought input for this EA through various public involvement activities. These activities included a comment period and informal scoping meetings with local individuals.

During scoping at the start of the NEPA process, four small group and informal public meetings were held with stakeholders identified through NASA's ongoing environmental clean-up effort. These meetings provided an opportunity for NASA JPL to better understand key stakeholder concerns and address these in the EA evaluation.

NASA JPL issued the draft EA for a 15 day public comment period that ended June 28, 2012. NASA JPL published a Notice of Availability (NOA) announcing the availability of the Draft EA in the Pasadena Star News and the La Canada Valley Sun, and made it available for public review on the NASA Management Office website and at the following locations:

Altadena Public Library East Mariposa Altadena, CA 91001

Pasadena Public Library 285 East Walnut Pasadena, CA 91101

NASA Headquarters Library, 1120 E. Street, SW Washington, DC 20546 La Canada Flintridge Public Library 4545 West Oakwood Avenue La Canada, CA 91011

NASA JPL also sent the draft EA to Federal, State, and local agencies and interested individuals identified during scoping. NASA JPL received 37 comments. See Appendix A for a summary of comments received and NASA JPL responses.

On-Site Parking Structure at NASA JPL

CONCLUSIONS

Pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321, et seq.), the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508), and NASA policy and procedures (14 CFR Part 1216, Subpart 1216.3), and after careful review of the EA, NASA has made a finding of no significant impact (FONSI) with respect to the proposed NASA Jet Propulsion Laboratory (JPL) On-Site Parking Structure. On the basis of the EA for the On-Site Parking Structure, it is concluded that the environmental impacts associated with the proposed action at Alternative A-Arroyo Parking Structure or Alternative B- Mall Parking Structure will not individually or cumulatively have a significant effect on the quality of the human and natural environment.

Therefore, an environmental impact statement will not be prepared and NASA JPL is issuing this FONSI. The Final EA and FONSI will be available in NASA Management Office website: https://nmo.nasa.gov/general_frameset.cfm?home_button=1&site=home&CFID=316020&CFTOKEN=34385941

Dr. Eugene Trinh

Director NASA Management Office

APPENDIX A

Summary of Public Comments on Draft EA and NASA JPL Responses

| Summary of Comments | NACA IDI Dognongo |
|---|--|
| Summary of Comments One commenter requested the installation of a new bridge that could obviate the need for most passenger vehicle traffic north to the existing JPL Bridge, across the bridge, and then south to the new parking structure. | NASA JPL Response A new bridge would not meet the purpose and need of providing immediate parking. Also, funding for an on-site parking structure is a line item in the congressionally approved budget and there is no contingency in this budget for construction of a new bridge over non-federal land. Construction of new roadway and bridge across the Arroyo Seco would not be consistent with the Hahamongna Master Plan. |
| Three commenters support Alternative | Comments noted. |
| A-Arroyo Parking Structure Two commenters recommended sustainability features such as electrical support for future photo voltaic panels, structural and electrical support for future electric vehicle charging stations, use of regionally indigenous plant materials, appropriate irrigation systems and maintenance practices in the landscaping, best practices for increasing rainfall runoff, bicycle facilities, and install sufficient solar photovoltaic generating capacity on the structure to meet the parking structure power needs. | The parking structure is to be design-build and the project has yet to enter into the design phase. NASA JPL will make efforts within the approved budget to provide for sustainability features in the parking structure design and construction. Design and construction will comply with NASA JPL Facilities Design Standards which include the use of appropriate landscaping, irrigation, and maintenance. |
| One commenter suggested additional ideas including a new or realigned onsite access road at the East Gate, providing an environmentally powered (i.e., electric or other low-carbon fuel) bus for local commuters, and charging a fee for parking. | Comment noted. NASA JPL recognizes that a critical balance of several strategies would be required to ensure adequate parking, continued availability of transportation options, and adequate levels of service on the roadways and circulation within and around the Laboratory. While these ideas are worthy of consideration in an overall parking strategy, they will not be evaluated as a part of this EA, which covers only the parking structure construction and removal of the East Arroyo Lot improvements. |
| One commenter noted contradiction in Alternative B regarding negligible adverse impacts on operational air emissions and an increase in on-site traffic congestion. | Compared to Alternative A, Alternative B would involve more driving across the lab, and does have potential for incremental air impacts/onsite traffic congestion, although still minor and not warranting of additional analysis. |
| One commenter suggested an additional mitigation measure of maintaining an access control system to maintain the pre-project distribution of employeegenerated traffic volumes during both the peak-generating hours and on a daily basis. The commenter also suggested that the mitigation measure(s) effectiveness be monitored and modified if needed to maintain the balance of traffic. The commenter also suggested the sharing of this monitoring information with affected stakeholders. | Comment noted. NASA JPL will consider mitigation measures to maintain the balance of traffic between Oak Grove Blvd. and Windsor Avenue entrances to the Lab. NASA/JPL will also monitor this traffic balance at peak and off peak hours to determine if the mitigation measure(s) implemented are effective. Modifications to the mitigation measure(s) implemented will also be considered should NASA/JPL's evaluation show the measure(s) to be ineffective. |

| One commenter suggested relocating text | Comment noted and the changes were made. |
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| in the EA from construction impacts to | |
| operational impacts. | |
| One commenter corrected a species of | Comment noted and the change was made. |
| tree for removal in Alternative A. | The modeling etweeting is to be desired by its and the second |
| Three commenters suggested minimizing | The parking structure is to be design-build and has yet to enter |
| impacts on viewshed from Alternative A including the use of vegetation and a | into the design phase. The EA states that NASA JPL would |
| creative/fun wall to soften the façade of | attempt to minimize any potential impacts to visual resources by developing a pleasing eastern facade during design and |
| Alternative A. | construction. The use of vegetation is not precluded. |
| Three commenters suggested no longer | NASA/JPL and the City of Pasadena have agreed that it is to |
| leasing the West Arroyo parking lot so | their mutual benefit to continue this lease. |
| that it can be returned to open space. | then matual benefit to continue this lease. |
| Two commenters suggested including | The proposed parking structure is to be design-build and the |
| spaces for subcompact and mini cars. | project has yet to enter into the design phase. NASA/JPL will |
| spaces for successipace and man cars. | make efforts within the approved budget to maximize the |
| | number of space by providing for subcompact and mini cars. |
| Two commenters suggested including | Although not associated with this project, NASA JPL, in |
| the Los Angeles County's proposed | response to this comment, has included a description of the Los |
| sediment removal project in the | Angeles County's upcoming sediment removal project in the |
| cumulative impacts | Cumulative Impact section of the EA. |
| One commenter noted that not the entire | The EA was updated to reflect that most of the Hahamongna |
| Hahamongna basin is designated as Open | basin is designated as Open Space. |
| Space. | |
| Two commenters recommended | As is NASA JPL practice, coordination with the City of |
| coordination with the City of Pasadena | Pasadena on construction activities that may interrupt or |
| prior to construction activities that would | inconvenience users of HWP will be conducted. |
| interrupt or inconvenience users of | |
| Hahamongna Watershed Park (HWP) | |
| One commenter refuted the biological | The biological survey was conducted by a certified biologist, |
| survey and stated there were several | which did not find those species onsite. Since either |
| species of concern on-site. | alternative has some potential for minor offsite impacts, |
| | mitigation has been included in the EA to minimize |
| 0 | disturbance to species. |
| One commenter suggested compliance | The proposed parking structure is to be design-build and the |
| with dark sky outdoor lighting. | project has yet to enter into the design phase. NASA JPL |
| | included the use of downward pointing energy conserving lighting in recent construction and will make efforts to include |
| | similar lighting in the parking structure. |
| One commenter suggested construction | The EA identifies short term minor adverse traffic impacts |
| activities related to Alternative A may | from the demolition and asphalt removal associated with |
| adversely impact east parking lot entry | vacating the East Arroyo Parking Lot. Most construction |
| road at the corner of Windsor Avenue | traffic will use the regular south gate contractor entrance. |
| and Ventura Street | Same sound summing. |
| One commenter suggested traffic | As it has in the past, NASA JPL will notify employees of |
| circulation impacts would cause some | potential short term traffic impacts during construction and |
| JPL employees to seek parking in HWP. | provide alternative routes and on-site parking. |
| One commenter suggested emergency | Current NASA JPL emergency/contingency plans include exit |
| conditions could necessitate the use of | through the Hahamongna park during extreme emergencies. |
| HWP as a vehicular emergency exit | |
| route. | |
| One commenter suggested the Upper | The HWP Master Plan specifies the use of the Lower Road by |
| Road will provide better East access to | the public and the NASA JPL workforce. |
| JPL. | |
| One commenter suggested restoration of | NASA JPL will remove all structures and other improvements |
| the East Parking Lot with native | in the East Lot, the City of Pasadena then has plans to |

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| vegetation | recontour the area for use as spreading basins. |
| One commenter questioned the need for | Since the parking structure is to be design-build and the project |
| 1,093 parking spaces. | has yet to enter into the design phase, conservative estimates |
| | have been applied to quantities. Structure height and number of |
| | parking spaces are budget dependent and will be determined |
| | after the start of the design/build process. |
| Three commenters wanted assurance that | A badge is required to access the NASA JPL facility and the |
| only the JPL workforce and not the | parking structure will be built within the NASA JPL facility. |
| public would use the parking structure. | |
| One commenter suggested a more | The parking structure is to be design-build and the project has |
| detailed description of Southern | yet to enter into the design phase. The EA states that other |
| California Edison's utility relocation. | functional, structural, and site features/requirements would be |
| | addressed during the design phase, including the relocation of |
| | a 16-kilovolt (kV) overhead power line by SCE, either by re- |
| | routing the overhead lines around the new parking structure; or |
| | installing underground lines from the NASA JPL fence line |
| | into the Alternative A site. NASA JPL has agreed to |
| | accommodate SCE's on-site access to its facilities. |
| One commenter wanted a clearer image | The image provided was made larger (whole page) to enhance |
| of local floodplain elevations. | detail for the reader. With regards to Alternative A, the project |
| | site is not within the Los Angeles (LA) County Flood Control |
| | easement. |
| One commenter wanted early and quality | NASA JPL will comply with the necessary Native American |
| consultation with the Native American | cultural resources regulations to insure that the proper |
| representatives. | procedures for the protection of Native American cultural |
| | resources are fully implemented. If any assistance is required |
| | in regards to Native American cultural resources, NASA JPL |
| | will communicate with the appropriate Native American |
| | contacts provided. |